METROPOLITAN TRANSPORTATION COMMISSION
SERVICE AUTHORITY FOR FREEWAYS AND EXPRESSWAYS



March 23, 2010

**REQUEST FOR PROPOSALS**
**In-Vehicle Maintenance for Voice & Data Communication Equipment**

Dear Contractor:

The Metropolitan Transportation Commission Service Authority for Freeways and Expressways (MTC SAFE) invites your firm to submit a proposal to provide maintenance for voice and data communication equipment for the Bay Area Freeway Service Patrol. Maintenance will consist of installation and removal and swapping and/or repairing of Kenwood radios, Mentor Mobile Data Terminals (MDTs) and other identified fixed equipment.

This letter together with its enclosures comprises the Request for Proposals (RFP) for this project. Responses should be submitted in accordance with the instructions set forth herein.

## Proposal Due Date

Interested firms must submit an original and four (4) copies of their proposal by **4:00 p.m. on Friday, April 16, 2010. Proposals received after that date and time will not be considered.** Submitted proposals will be considered firm offers to enter into a contract and perform the work described in this RFP for a period of ninety (90) days from their submission.

## MTC SAFE Point of Contact

Proposals and all inquiries relating to this RFP shall be submitted to the address shown below. For telephone inquiries call (510) 817-5878. E-mail inquiries may be addressed to <nrohlich@mtc.ca.gov>.

Nina Rohlich, Project Manager
MTC SAFE
Joseph P. Bort MetroCenter
101 8th Street
Oakland, CA 94607-4700

## Background

The Bay Area Freeway Service Patrol program is a joint project of the MTC SAFE, the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). The service is provided by private tow truck companies, under contract to MTC SAFE.

The fleet of 78 tow trucks and seven back up trucks patrol over 540 miles of Bay Area freeways. The FSP tow operators look for stranded motorist and offer help by changing a flat tire, "jump starting" a dead battery, refilling a radiator or providing a gallon of fuel. If the automobile still won't start, it is towed off the freeway to the nearest CHP-identified locations.

In order to manage and dispatch these vehicles in the most efficient and cost-effective manner, FSP has developed a communications and data management system that has become a critical component to the current and future operations of this program. The system is used to:

- Dispatch service from the CHP dispatch center in Vallejo;
- Record critical operating data;
- Confirm tow contract billing;
- Monitor truck, driver and contractor performance; and
- Evaluate overall program.

The FSP dispatchers that monitor the operations of the tow vehicles are located within the CHP's Golden Gate Communication Center (GGCC), on Benicia Road in Vallejo, California. The dispatchers communicate with the tow operators using Kenwood radios and Mentor Mobile Data Terminals (MDT). MDTs are used by the tow operators to communicate with the dispatchers using data communication messages or status codes. MDTs are equipped with global positioning systems that allow the dispatchers to track vehicle location using an automatic vehicle location (AVL) system. Various codes are used by the tow operators to inform the dispatchers of their status.

## Scope of Work, Schedule and Budget

The workscope for this RFP is detailed in *Appendix A*, Scope of Work. The term of the contract will extend from June 1, 2010 through June 30, 2012. At MTC SAFE's sole option the contract may be extended for two (2) additional two (2) year periods (four additional years total). The project budget for the initial term of the contract is estimated to be $175,000, which includes $120,000 for the installation and removal of equipment and $55,000 for maintenance expenses. Amounts payable after June 30, 2010 are subject to MTC SAFE's budget approval process. The contract resulting from this RFP shall be a fixed-price contract with payment based on the unit prices proposed in *Appendix B*, Proposal Calculation Worksheet.

## Addenda and Request for Exceptions

Any addenda will be posted on MTC's website. All potential bidders are responsible for checking the website for any addenda to the bid documents.

Any requests for clarification of or exceptions to RFP requirements must be received by MTC no later than 4:00 p.m. on Friday, April 9, 2010 to guarantee response or consideration.

## Form of Proposal

Proposal content and completeness are most important. Clarity is essential and will be considered in assessing the proposer's capabilities. Each proposal should include:

1. A transmittal letter signed by an official authorized to solicit business and enter into contracts for the firm. The transmittal letter should refer to this RFP by title and date, and should include the name, telephone number and email of a contact person, if different from the signatory, and a statement that the proposal is a firm offer to enter into a contract with MTC SAFE according to the terms of this RFP for ninety (90) days following its submission;
2. A brief discussion that illustrates the Contractor's approach to be taken with respect to performing each of the tasks contained in *Appendix A*, Scope of Work.
3. A detailed statement of the Contractor's experience and qualifications relevant to providing voice and data communications and services as requested under this RFP. If Subcontractors are involved in the proposal, their experience and qualifications should also be addressed.
4. References of at least three (3) clients other than MTC SAFE for whom the Contractor has done similar or related work in excess of $50,000, along with the names, telephone numbers, and emails of the contact person for each reference.
5. A price proposal specifying all costs to MTC SAFE for the required services, including but not limited to: equipment fees, routine maintenance charges, storage fees, installation and removal, any other labor, material and equipment charges, and all applicable surcharges including overhead and profit. A proposal calculation worksheet is attached to this RFP as *Appendix B,* Proposal Calculation Worksheet. **Proposers are required to complete and submit this worksheet as their cost proposal.**
6. A signed California Levine Act Statement (*Appendix D*).
7. A signed Insurance Requirements Form (*Appendix E-1*).

## Evaluation Factors

The MTC SAFE Project Manager, in consultation with the MTC Office of General Counsel, will conduct an initial review of the proposals for inclusion of the items requested in Form of Proposal above. Any proposal that does not include enough information to permit the evaluators to rate the proposal in any one of the evaluation factors listed below will be considered non-responsive and will not be evaluated. A proposal that fails to include one or more items requested in Form of Proposal may be considered complete and generally responsive, if evaluation in every criterion is possible.

Responsive proposals will be evaluated by a panel of staff representatives from MTC SAFE, based on the following evaluation factors:

- Cost Effectiveness (35%)- Includes an evaluation of the reasonableness of the prices proposed for accomplishing the work specified in *Appendix A* Scope of Work and the hourly rates of personnel.
- Experience and Qualifications (25%)- Evaluators will evaluate individual and team expertise and experience relevant to work specified in *Appendix A* Scope of Work.

- References (20%)- Evaluators will contact references on forms, see *Appendix C* Reference Check Form.
- Effectiveness of Proposer's approach to accomplishing the Scope of Work (20%)- Evaluators will evaluate proposer's approach to conducting and completing tasks and effectively managing and coordinating all project resources.

Following the evaluation, the panel may elect to recommend award to a particular proposer or may interview a "short list" of proposers, prior to selection. The MTC SAFE Project Manager will then recommend a Contractor to the Executive Director. If he agrees with the recommendation, he will request the approval of the MTC Operations Committee.

MTC SAFE reserves the right to not convene interviews and to make an award on the basis of written proposals, alone. Further, MTC SAFE reserves the right to accept or reject any and all proposals submitted, to waive minor irregularities in proposals, and to request additional information from the proposers. Any award made will be made to the firm whose proposal is the most advantageous to MTC SAFE, based on the evaluation criteria listed above.

**Contractor Selection Timetable**

| | |
|---|---|
| 4:00 p.m., Friday, April 9, 2010 | Closing date and time for requests for clarifications/exceptions |
| 4:00 p.m., Friday, April 9, 2010 | Closing date for receipt of objections to RFP provisions |
| **4:00 p.m., Friday, April 16, 2010** | **Closing date and time for receipt of Proposals** |
| April 22-23, 2010 | Discussion (if necessary) |
| Friday, May 14, 2010 | Recommend Award to MTC Operations Committee |
| Friday, June 1, 2010 (approximate) | Execution of Contract |

**Selection Disputes**

A proposer may object to a provision of the RFP on the grounds that it is arbitrary, biased, or unduly restrictive, or to the selection of a particular Contractor on the grounds that MTC SAFE procedures, the provisions of the RFP or applicable provisions of federal, state or local law have been violated or inaccurately or inappropriately applied by submitting to the MTC SAFE Project Manager a written explanation of the basis for the protest:

1) No later than five (5) working days prior to the date proposals are due, for objections to RFP provisions;

2) No later than three (3) working days after the date on which the proposer is notified that it was found to be nonresponsive or has failed to meet the minimum qualifications; or

3) No later than three (3) working days after the date on which contract award is authorized by the Operations Committee or the date notified that it was not selected, whichever is later, for objections to Contractor selection.

Except with regard to initial determinations of non-responsiveness or failure to meet the minimum requirements, the evaluation record shall remain confidential until the MTC Operations Committee authorizes award.

Protests of recommended awards must clearly and specifically describe the basis for the protest in sufficient detail for the MTC SAFE review officer to recommend a resolution to the Executive Director.

The Executive Director will respond to the protest in writing, based on the recommendation of a staff review officer. Authorization to award a contract to a particular Contractor by the MTC Operations Committee shall be deemed conditional until the expiration of the protest period or, if a protest is filed, the issuance of a written response to the protest by the Executive Director.

Should the Proposer wish to appeal the decision of the Executive Director, it may file a written appeal with the MTC Operations Committee, no later than three (3) working days after receipt of the written response from the Executive Director. The MTC Operations Committee's decision will be the final agency decision.

## General Conditions

MTC SAFE will not reimburse any Contractor for costs related to preparing and submitting a proposal.

All materials submitted by proposers are subject to public inspection under the California Public Records Act (Government Code § 6250 *et seq*.), unless exempt.

A synopsis of MTC SAFE's contract provisions is enclosed for your reference as *Appendix E*. If a proposer wishes to propose a change to any standard MTC SAFE contract provision, the provision and the proposed alternative language must be submitted prior to the closing date for receipt of requests for clarifications/exceptions listed above. If no such change is requested, the Contractor will be deemed to accept MTC SAFE's standard contract provisions, unless such language is protested in accordance with the procedures listed above.

The selected Contractor will be required to maintain insurance coverage, during the term of the contract, at the levels described in *Appendix E-1*. Contractor agrees to provide the required certificates of insurance providing verification of the minimum insurance requirements listed in *Appendix E-1*, Insurance Requirements, within five (5) days of MTC's notice to firm that it is the successful proposer. Requests to change MTC SAFE's insurance requirements should be submitted on or prior to the closing date for receipt of requests for clarifications/exceptions listed above. MTC SAFE will review the requests and issue an addendum if material changes requested by a prospective proposer are acceptable. Objections to MTC SAFE determinations on requests to change insurance requirements must be brought to MTC SAFE's attention no later than the date for protesting RFP provisions listed above. If such objections are

not brought to MTC SAFE's attention consistent with the protest provisions of this RFP, compliance with all material insurance requirements will be assumed.

**Authority to Commit MTC SAFE**

Based on the MTC SAFE's staff evaluation, the Executive Director of MTC will recommend a Contractor to the MTC Operations Committee, which will commit MTC SAFE to the expenditure of funds in connection with this RFP.

Thank you for your interest.

Very truly yours,

Steve Heminger
Executive Director

SH: NR
J:\CONTRACT\Procurements\Operations & Support Svcs\RFPs\SAFE\FSP In-Vehicle Equip Maint\FSP In-Vehicle Equip Maint.doc

# APPENDIX A
## SCOPE OF WORK

The selected Contractor shall provide maintenance for voice and data communication equipment for the Bay Area Freeway Service Patrol. Maintenance will consist of installation and removal and swapping and/or repairing of Kenwood radios, Mentor Mobile Data Terminals (MDTs) and other identified fixed equipment.

### TASK 1.0 INSTALLATION/DE-INSTALLATION OF RADIOS AND MOBILE DATA TERMINALS (MDT)

The selected Contractor shall install Kenwood TK 8180K radios (radios) and Mentor Mobile Data Terminals (MDTs) and associated cabling and antennas in vehicles at the start of new MTC SAFE tow contracts or when new or additional trucks are introduced into FSP service. Also, the selected Contractor shall remove the radios and MDTs when vehicles leave FSP service. The selected Contractor shall coordinate and schedule the installation of radios and MDTs in conjunction with the FSP tow contractors, CHP and MTC SAFE Project Manager. The selected Contractor shall travel to the various tow contractor locations (see *Appendix A-1*, Freeway Service Patrol Contractors, for a list of contractor locations) for all installation and removal work. The contractors and locations listed in *Appendix A-1* may change over term of the contract, but locations should generally be within the nine-county Bay Area. If a new tow contractor's main office is located outside of the Bay Area, the tow contractor will be required to coordinate with the selected Contractor for a location within the nine-county Bay Area for vehicle maintenance and installations or removals.

At the commencement of the contract, the selected Contractor shall receive 20 spare radios and 20 spare MDTs from MTC SAFE for use under this Task 1. Any additional radios and MDTs required for installation will be procured by MTC SAFE under a separate contract and forwarded to the selected Contractor for its use. The selected Contractor shall store radios and MDTs in Contractor's storage facility and maintain an inventory of all units.

### TASK 2.0 RADIO AND MDT EQUIPMENT MAINTENANCE

The selected Contractor shall provide supplies and services essential to the normal day-to-day operations of the FSP voice and data communications systems. A description of these systems is attached hereto as *Appendix A-2*, Radio (Voice) and MDT (Data) System Description.

Work shall include routine repairs to the radios comprising the Voice Communications System. Routine repairs include but are not limited to such things as replacing or swapping a radio unit, repair to microphone and speakers, repair to brackets, installing new microphone clip, and replacing the antenna. The selected Contractor should keep spare parts with them to avoid making multiple trips to FSP tow contractor sites. The selected Contractor shall also maintain the base station equipment located at the AAA Offices in Hayward and at CHP Golden Gate in Vallejo.

The selected Contractor shall troubleshoot malfunctioning MDTs and associated equipment comprising the Data Communications System in accordance with *Appendix A-4*, MDT Hardware Installation Guide. A malfunctioning MDT unit that cannot be repaired by following the procedures listed in *Appendix A-4*, shall be mailed directly to Mentor Engineering and replaced with a spare MDT unit. **The cost for**

**shipping non-functional MDTs to Mentor Engineering in Calgary, Alberta, Canada, shall be incorporated in the Contractor's fixed price proposal.**

All in-vehicle equipment shall receive service within **forty-eight hours** following faxed notification that a problem exists. Notification shall be pursuant to a "HOT FAX SERVICE REQUEST" form which shall be faxed by the FSP contractor to the selected Contractor and MTC SAFE. A copy of this form is attached hereto as *Appendix A-3*, Hot Fax Service Request.

Service shall be provided at the various contractor locations between 8 am and 5 pm PST, Monday through Friday, contractor-observed holidays excepted.

## TASK 3.0 TASK ORDERS

Additional work that is not part of TASK 1.0 or TASK 2.0 shall be assigned by the MTC SAFE Project Manager on a "Task Order" basis. Task Orders must be signed by both parties in order to authorize the purchase. Task orders will be compensated as a fixed price contract on the basis of satisfactory completion of deliverables or on a time and materials basis based on the hourly rates submitted in *Appendix B*. A sample Task Order is provided below.

**SAMPLE TASK ORDER**

**1. Effective Date:** **2. Task Order No:**

**3. Title of Task:**

**4. Scope of Work:**

**5. Project Objective:**

**6. Period of Performance for Task Order:**

**7. Maximum Amount Payable:**

**8. Method of Payment:**

| Time and materials/Deliverables-based | Per unit/ Hourly rate | # units/ # of hours | total |
|---|---|---|---|
| | | | |
| | | | |

# APPENDIX A-1
## FREEWAY SERVICE PATROL CONTRACTORS, JANUARY 2010

| TOW COMPANY | CITY |
|---|---|
| Atlas Towing Services, Inc. | San Francisco |
| B&A Towing | San Francisco |
| Bill's Towing | Novato |
| Campbell's Towing | San Jose |
| Courtesy Tow Services, Inc. | San Jose |
| Ken Betts' Towing | Oakland |
| K&S Towing | Bay Point |
| Lima Tow | Santa Clara |
| Matos Towing & Transport | San Jose |
| Myers Towing Services | Fremont |
| Nelson's Towing | San Francisco |
| Palace Garage | San Leandro |
| Redhill Towing & Autobody | San Rafael |
| Roadrunner Tow | Fairfield |
| Sideline Towing | Daly City |
| Sierra Hart | West Sacramento/Napa |
| Sunrise Enterprise 87 | East Palo Alto |
| Vacaville Tow | Vacaville |
| Yarbrough Bros. Towing | Santa Rosa |

# APPENDIX A-2
## RADIO (VOICE) AND MDT (DATA) SYSTEM DESCRIPTION

### Voice Communications System

The in-vehicle radio transceiver in the tow and CHP vehicles is the Kenwood 8180K. These transceivers operate in the T-band (490-512 MHz) over six mountain top repeaters. Three of the repeaters, Big Rock, Diablo and Vacaville, send analog messages directly to the Golden Gate Communications Center (GGCC) in Vallejo. The other three, Monument, Presson and San Bruno, send messages to the California State Automobile Association Facility in Hayward where they are then sent via three SBC analog leased lines to the CHP Golden Gate Communications Center. At GGCC, the analog messages are routed to an AVTEC Central Console that allows the FSP Dispatchers to communicate with either tow operators or CHP supervisors.

### Data Communications System

The existing data communications subsystem is made up of the in-vehicle data equipment, the communications backbone, and the base data equipment. The in-vehicle data equipment includes: the Mentor Mobile Data Computer (MDT), the data/GPS antennae and associated power cables, and MDT mount.

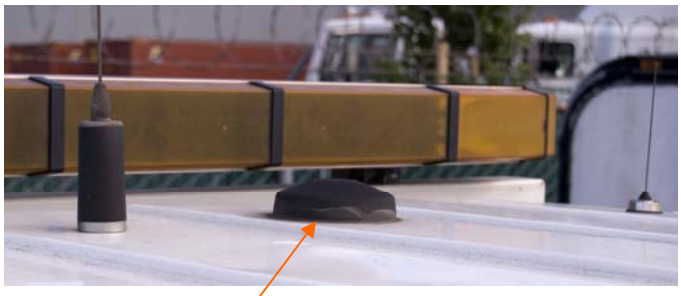
*These photos show both voice and data communications systems in the tow trucks and at GGCC. CA State Automobile Association Facility in Hayward photos not shown here.*

Wiring/cables MDT

MDT Mount

MDT Wiring/Cables

Radio and Microphone



Data/GPS antennae

GGCC Radios

**APPENDIX A-3**

# HOT FAX

SERVICE REQUEST FOR IN-VEHICLE TELECOMMUNICATIONS EQUIPMENT

## FAX TO

*Fax to both contacts*

SELECTED CONTRACTOR: 123-456-7890

MTC SAFE, attn: Adrian Fine: 510-817-5848

## FROM

| | | | |
|---|---|---|---|
| Contractor | | Contact Name | |
| Contact # | | Driver Name | |
| Date | | Time | |
| FSP Vehicle # | | | |

## SERVICE REQUESTED

Type

Data:
- ☐ MDT/Ranger
- ☐ Cables
- ☐ Data Antenna

Voice:
- ☐ Kenwood Radio Unit
- ☐ Speaker(s)
- ☐ Microphone
- ☐ Radio Antenna

Service Requested

## STAFF USE ONLY

Scheduled Date

Scheduled Time

Technician

Problem

Solution

When Selected Contractor has completed a maintenance request, attach this Hot Fax to the work order form and mail to Adrian Fine.

# APPENDIX A-4
## MDT HARDWARE INSTALLATION GUIDE

<reproduced with permission from Mentor Engineering; see PDF attached at end of document>

APPENDIX A-4

# Hardware Installation Guide

Ranger 7-RNGR-01X
Ver 4.1

# Table of Contents

# Table of Contents

**WARNING**

**FAILURE TO INSTALL THE EQUIPMENT AS RECOMMENDED COULD CAUSE OR CONTRIBUTE TO AN ACCIDENT AND RESULT IN DAMAGE TO PROPERTY OR PERSONS.**

# Safety & After-Market Equipment

The use of after-market equipment in motor vehicles can compromise a vehicle's safety-related design characteristics, including but not limited to:

- Airbags, including but not limited to potential obstruction of air-bag deployment;
- Passenger compartment, including but not limited to potential for ergonomic problems, physical obstacles, etc.; and
- Trunk/gas tank protection, including but not limited to the potential for trunk-mounted equipment to exacerbate tank vulnerability in a rear collision.

**WARNING**

**This product is to be installed by qualified installation personnel only. Incorrect installation may result in FIRE or contribute to an ACCIDENT**

# Qualified Installer

This product is to be installed by qualified installation personnel only. The installer must be trained in industry best practices for this type of installation. The training would include but not be limited to:

**1. The appropriate methods for installing cables such that:**

- The operation of the vehicle is not interfered with.
- The installation process does not damage or interfere with other vehicle components and/or systems.
- Wiring is kept clear of sharp objects, sources of heat and any other hazard that could damage the cable or wire.
- Wiring is secured such that it does not cause damage to other equipment, itself, or interfere with the operation of other systems and devices.
- Wiring through bulkheads is performed such that wiring does not chafe, and a seal is maintained between compartments.
- Appropriate and industry standard fasteners, splices, connectors and ties are used for the vehicle environment.
- Appropriate slack is in place to prevent straining of the wire, cable or connectors.
- Any other issue that could affect the integrity of the wiring or the safe operation of the vehicle is addressed appropriately.

# QUALIFIED INSTALLER

2. **The appropriate methods for mounting equipment in vehicles such that:**

    - The safe operation of the vehicle is not interfered with.
    - The equipment is attached to the vehicle as securely as possible to minimize the risk of the equipment breaking free in an accident situation.
    - The installed device does not interfere with the deployment of air bags.
    - The installed device does not obscure displays or interfere with the ability of the driver to operate other vehicle systems and components.
    - The installation process does not damage other vehicle systems or components.
    - Compartments remain sealed against the elements.

3. **The correct use and operation of the required tools.**

Further:

- The installer must have the ability to read, understand and follow the instructions in the installation manual.
- The installer must be equipped with the correct tools for performing each installation operation.

The Customer must ensure that the installation of all equipment provided for this project is safe, used for its intended purpose, and is in continual accordance with all applicable codes, rules, regulations and guidelines provided by motor vehicle and equipment manufacturers, as well as any state, local or jurisdictional bodies.

# Introduction

Mentor Ranger® is a Windows CE fixed-mount computer for two-way wireless communication, electronic dispatching, in-vehicle navigation, and more.

This Ranger Installation guide includes directions for successfully installing and interfacing a Ranger into a vehicle. Specific wiring and installation procedures may change from customer to customer and should be discussed prior to installation. If any questions remain after reading this guide,please contact Mentor Engineering, (403) 777-3760 ext. 3, for more information.


**RANGER FACE DOWN VIEW**

# Before You Begin

**CAUTIONS**

a) Carefully read the Installation Guide before installing this product. If anything is unclear please contact Mentor Engineering for support.

b) Ensure that the NEGATIVE battery connection is disconnected before beginning work.
**NOTE:** Some components may lose short-term memory (i.e. engine or transmission adaptive parameters, and radio presets) after a protracted time without battery power.

c) Ranger should be serviced by qualified, trained personnel only. Attempting to remove the cover or disassemble the device could expose you to dangerous high voltage points.

d) Only use a damp cloth for cleaning. Never use any type of liquid/aerosol cleaner or any type of organic solvent to clean this product.

e) Do not attempt to install or operate a damaged device. If the unit has been exposed to excessive amounts of water; shows evidence of physical damage; or is not operating properly; unplug it from the power source and contact qualified service personnel.

f) Use of thread-locking compounds such as Loctite may cause serious damage to plastic enclosures. Many thread-locking compounds are not compatible with thermoplastics and can lead to stress cracking. This will require the unit to be returned to replace the ABS enclosures.

**ENSURE THAT YOU HAVE ALL OF THE ITEMS LISTED IN THE PARTS LIST**

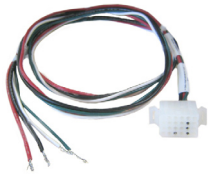
# Parts List

Please verify that you have everything that you need to complete the Ranger installation. NOTE: Not all parts are provided by Mentor.

**SUPPLIED**

- Ranger

- Ranger Interface Cable
  4-CAS-CGRDMMLX18-30



- Ranger Power Pigtail

- Ranger Mount

- GPS Antenna
- Communications Antenna

- In-line Cable Fuse(s)

# Parts List

## SUPPLIED (OPTIONAL)

- Emergency switch

- Mobile Radio Interface Cable

  P/N depends on radio type

## SPECIAL ORDER

- Power Supply

## NOT SUPPLIED

- Zip Ties
- Glued Heat Shrink
- Tools as Required
- Grommets
- Loom
- Fasteners

# Mounting Locations

## PLACEMENT

1) Ensure that the driver's view of the road will not be impacted.

2) Ensure that the equipment will not be in the path of any active airbags.

3) Ensure that the driver will still have access to all controls on the dash.

4) Ensure that the driver has a clear view of the terminal from the seated driving position.

5) Ensure that the terminal is within easy reach of the driver from the seated driving position.

6) Ensure that the mounting location is a solid surface. Locations that allow even small amounts of initial movement will loosen over time.

7) Before drilling any holes or using screws, check for vehicle wiring under the carpet or behind the instrument panel which could be pinched, cut or otherwise damaged.

8) If mounting through the floor, put body sealer over the underbody projections. Stamped acorn nuts, filled with sealer, are available at most body shops for this purpose. This will keep moisture out of the carpet and insulation and will forestall rust in this area.

9) If mounting under the instrument panel, be sure that there is no interference with proper operation of the foot controls.

10) Inquire if the vehicle will be cleaned with a high pressure water wand. If so, ensure that all equipment is installed somewhere that will be protected from this type of cleaning.

# Ranger Mounting Examples

## EXAMPLES OF SUITABLE MOUNTING LOCATIONS

Figure 1

Ranger Installed in an Orion II Bus

Figure 2

Ranger Installed in a Ford E-Series Cutaway

Figure 3

Ranger Installed in a Chevrolet 3500 Series Cutaway

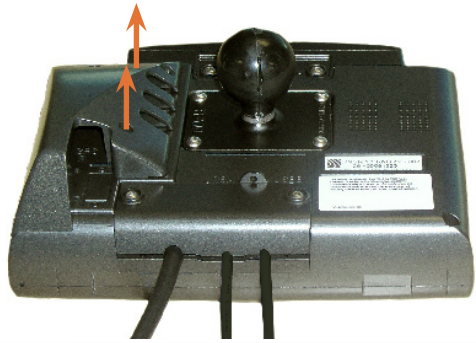
# Removal of Cover Plate

**Ranger Cover Plate and Strain Relief**

The Ranger has built-in strain relief for the cable connections located at the bottom of the unit. It is important to remove the strain relief before inserting or removing cables. Below are the steps involved in doing this correctly:

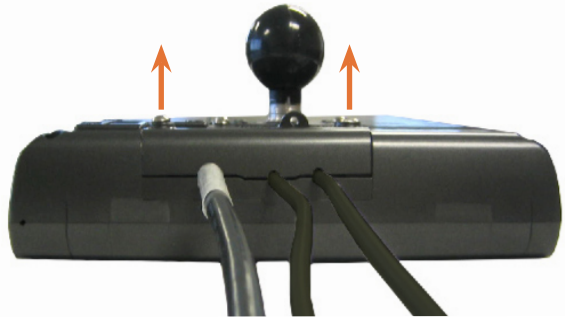
## Step 1

Remove the screws securing the antenna cover to the Ranger. This will require a 2mm Hex bit.



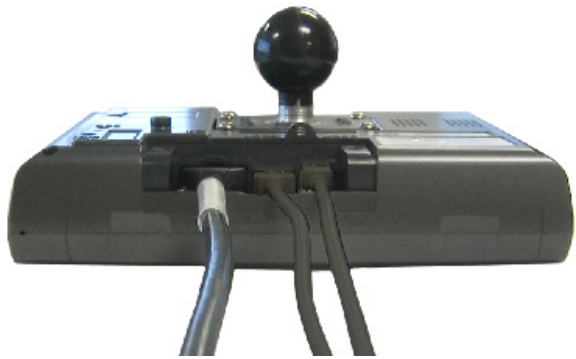
## Step 2

Remove the screws securing the cable compartment cover. This will require a 2.5mm Hex bit or 2.5mm security Hex bit.



## Step 2a

The cables should now be exposed. DO NOT ATTEMPT TO REMOVE THE CABLES AT THIS POINT. The strain relief is located under the cables and still needs to be removed before attempting to remove the cables.



# Removal of Cover Plate

**Torque Settings**

There are a number of items that may need to be installed to a specific torque level. This includes the Main Cable Cover, Mounting Ball, RF Cable Cover and antennas. The following Table lists the recommended torque settings for installing these items. Over and under torquing can lead to product damage and/or failure.

We recommend using a calibrated torque screwdriver for tightening all screws. A Huber Suhner SMA torque wrench (74Z-0-0-21) is recommended for tightening the Antenna cable.

| Description | Mentor Part Number | Recommended Torque | |
|---|---|---|---|
| | | Oz.In | N.cm |
| Main Cable Cover | 3-ENC-RNGRP226-XX | 80-90 | 55-65 |
| Mounting Ball | 6-MNT-RAMCMN2X-XX | 80-90 | 55-65 |
| RF Cable Cover | 3-ENCRNGRP252-XX | 80-90 | 55-65 |
| SMA Antenna Cable | 6-ANT-XXXXXXXX-XX | 140 | 100 |

# Attaching RF/GPS Cable Cover

## SUPPLIES REQUIRED TO INSTALL COVER

In order to install the RF/GPS Cover, the following items will be used. Most items are included in your shipment of Ranger equipment:

- Ranger RF/GPS Cover
- 6mm length hex screw (Quantity 2)
- Hex bit, for 2mm hex head screws
- 5/16" wrench (torque wrench preferred) **

***Not included*

## Step 1


Secure RF cable leg to the SMA connector on Ranger. The connector can be tightened by hand initially, then should be secured further using a 5/16" wrench turning the nut an additional 1/8 turn. A Suhner 74 Z 0-0-21 torque wrench (1Nm) is the preferred tool.

The final positioning of the RF cable should be that it resides to the left of the GPS connector.

# Attaching RF/GPS Cable Cover

## Step 2

Secure GPS leg to SMB connector on Ranger. The connector should be pushed on to the SMB until a small snap is heard.

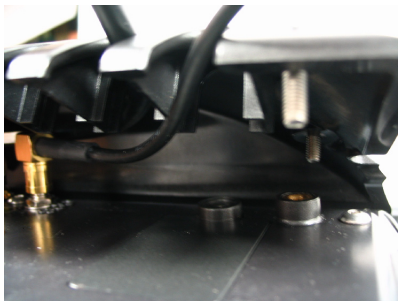
The final positioning of the GPS cable should be that it follows closely with the RF cable.

# Attaching RF/GPS Cable Cover

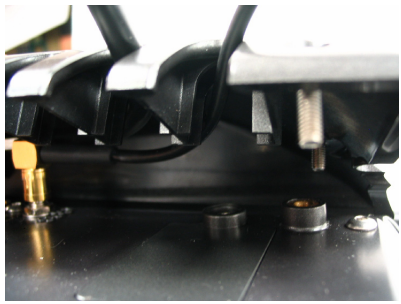
## Step 3

Thread the antenna cables through the holes in the cover.

The cables must be threaded in such a way that they will not be pinched by the cover when it is attached to the Ranger.



Incorrect Placement



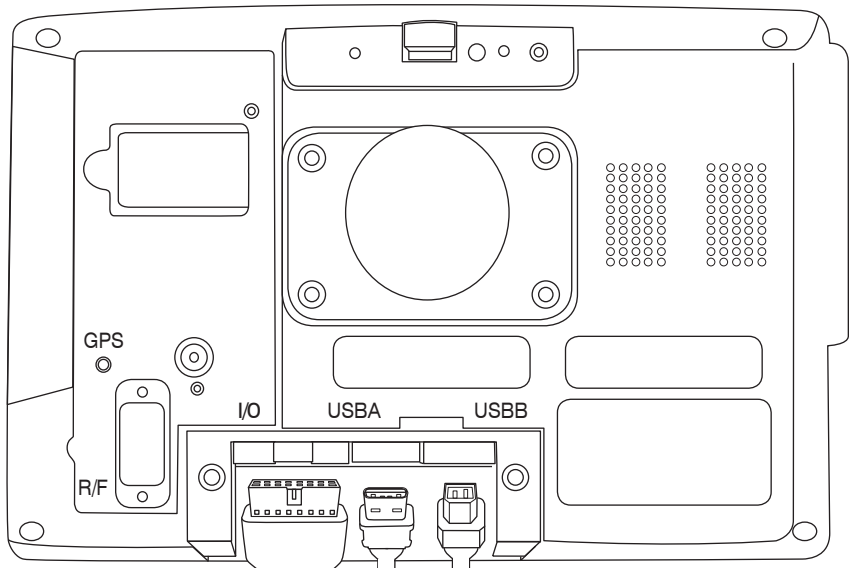
Correct Placement

# Attaching RF/GPS Cable Cover

## Step 4


Attach the cover to Ranger and secure with the 6mm hex screws to the specified torque.

# Wiring - Ranger Back View




16 Pin C-Grid III

4-CAS-CGRDMMLX18-30

to PC Active Sync

USB Port

24-Pin Male Molex

24-Pin Female Molex

4-CAS-PIGTVEHCXX-XX

## REQUIRED

| | |
|---|---|
| Green (Ignition Sense, 12/24V, 2A fuse) | 6 |
| White (not used) | 7 |
| Red (Vin, 12/24V, 3A fuse) | 8 |
| Black (Ground) | 16 |

# Connection Points

**1) SPLICING**

T-Taps are not a suitable form of splicing into existing cabling. All splices must be soldered and glued. Heat shrink must be used for protection.

**2) POWER**

Power connections should be made directly to the battery and fused as close to the battery as possible. Avoid using a cigarette lighter or "Power Point" receptacles as power sources. Appropriate fuses are provided with the installation equipment.

**3) GROUND**

The ground point should be that point where the (-) terminal from the battery is connected to the body. This connection to the battery is typically a 6 or 8 AWG black wire connected to the wheelhouse or radiator support.

Do not fuse the ground lead. If the ground-side fuse were to open, the entire supply current would be conducted by an alternate current return path, which may cause the feed line to overheat possibly resulting damage.

**4) SWITCHED IGNITION POWER**

It is important to utilize an unused ignition point. Connecting to an ignition point that is currently being used to switch other devices can cause improper operation of those devices.

There are two methods for interfacing to the vehicle ignition. If neither of these options are possible, then contact your Mentor project manager and alternate ignition options can be discussed and approved.

# Connection Points

**a) Auxiliary Electrical Panel (Preferred)**

Many bus manufacturers will include an auxiliary electrical panel for interfacing peripheral devices. Below is an example of a common location in buses with a Ford chassis. One of these terminals will typically be a switched ignition point. A ring terminal should be used when connecting to this type of ignition interface point. Ask the local maintenance personnel if you need assistance to find this panel.


Figure 6

Example of an Auxiliary Electrical Panel on a Ford Van

**b) Fuse Panel**

An unused ignition activated position in the fuse panel is another option. This installation requires an Add-A-Circuit fuse holder as pictured below. It is not acceptable to use a "fuse sleave"

Figure 7

Add-A-Circuit Installation

**5) VSS (VEHICLE SPEED SENSOR FOR ODOMETER PULSES)**

Many vehicles have a VSS point which provides a pulse train from the transmission. Vehicles that do not have a VSS point with adequate signal characteristics will require the installation of a transducer. It is the responsibility of the installer and customer to locate a VSS point or determine the appropriate location for a transducer. Your Mentor Systems Engineer may be able to assist in locating suitable VSS point. He/She can also provide information on the type of signal that is required for accurate odometer tracking.

## 6) EMERGENCY SWITCH (OPTIONAL)

The emergency switch is usually installed somewhere that would allow for covert operation. This location needs to be chosen by the customer prior to the start of installation. Mentor will provide a switch if one is required. It is sometimes possible to use an existing switch already on the vehicle. The switch should be normally open with one side connected to vehicle power (12/24V) and the other connected to input 1 on Ranger. A 2A fuse should be used where the connection is made to vehicle power.

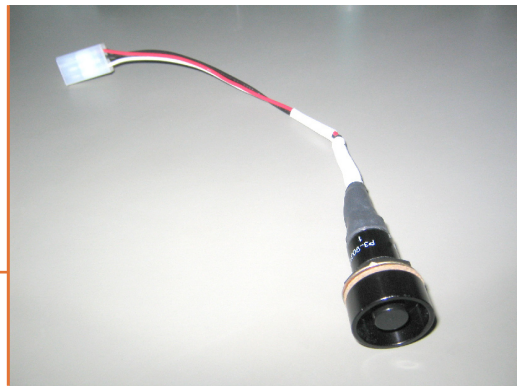


FIGURE 8

Emergency Switch

The emergency switch is typically installed on the lower left side of the driver seat.

Always ensure that the connector on the emergency switch pigtail is strain reliefed off the floor to prevent shorts if water enters the connector.

# Cabling

## 1) ROUTING

a) Use caution when routing wires between the passenger and engine compartments to avoid chafing or pinching the wires. Use grommets over any exposed sharp edges and strain reliefs to keep wires in place. Seal all holes to prevent moisture intrusion.

b) Route and secure all under-hood wiring away from mechanical hazards such as exhaust manifolds and moving parts.

c) Maintain as great a distance as possible between mobile radio power leads and the vehicle's electronic modules and wiring. Avoid running power leads in parallel with vehicle wiring over long distances.

d) If cabling is routed under the instrument panel, be sure that there is no interference with proper operation of the foot controls.

## 2) STRAIN RELIEF

Ensure that there is no strain exerted on cable connectors where they enter the unit. Avoid placing the unit in a position where the cable connectors entering the back of the unit are under pressure or strain of any kind. Ensure the power cable is fully inserted before replacing the strain relief and cable cover. In the event of undue stress or strain on installed cables and connectors, permanent damage may occur imparing the connections. This may result in intermittent or complete loss of communication and or power. Always include strain relief every 2-3 feet on long cable runs.

As the Ranger can be tilted and rotated freely by the driver/user, cabling should be installed such that moving/adjusting the position of the unit does not exert any significant stress on the cables.

### 3) LABELING

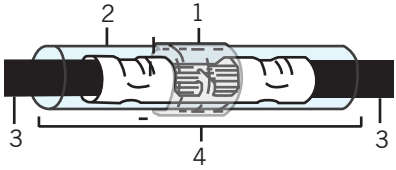
It is important to always label cabling at connection points. This simplifies maintenance in the future. Using cables with consistant coloring will also make maintenance easier.

### 4) CONNECTION TYPES

**Acceptable Connection Types**

a) Ring Terminals

b) Butt Splices with Self Contained Solder and Shrink Tubing




1. Solder Sleeve
2. Crimp Splice (shown crimped)
3. Wire
4. Shrink Tubing

c) Soldered Connections with Shrink Tubing

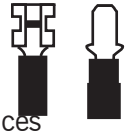
**Unacceptable Connection Types**

a) T-Taps

b) Spade Terminals

c) Marrettes

d) Blade Connectors



e) Standard Butt Splices

**5) WIRE TYPES**

The following are the minimum specifications for hook-up wire that should be used during the installation process:

a) Ranger Power and Ground
300V, 105°C PVC, 18AWG stranded

b) Ignition
300V, 105°C PVC, 22AWG stranded

c) Odometer Interface
300V, 105°C PVC, 22AWG stranded

d) Ranger Inputs (i.e. Emergency Input, etc.)
300V, 105°C PVC, 22AWG stranded

**6) ELECTRICAL MEASUREMENTS**

Always ensure that there is adequate voltage at the point where Ranger is being powered. Compare this voltage to the voltage at the battery. The two voltages should be almost the same or a different power point should be chosen closer to the battery.

# ANTENNAS

## 1) PLACEMENT

a) The GPS antenna must have a visible path to the sky at all times or it will fail to acquire the satellite signal necessary to secure a GPS fix.

b) If not using Dual Mode Antenna, the GPS Antenna should be installed at least 2 feet or more away from the mobile RF antenna.

c) The antenna should always be mounted a minimum of 8" away from the edge of the vehicle to avoid excessive RF radiation to people walking around the vehicle.

d) The antenna should always be mounted a minimum of 8" away from the position of any passengers on the vehicle.

## 2) INSTALLATION

a) When using an adhesive antenna, it is extremely important to make sure that the surface of the mounting location has been thoroughly cleaned. Use Isopropyl alcohol to clean the surface just before securing the adhesive pad.

### 3) CABLE ROUTING

a) The antenna cabling has a minimum inside bend radius of 2". Bending the cable tighter will cause degradation in antenna performance.

b) Avoid routing the antenna cable in parallel with the vehicle wiring over long distances.


FIGURE 7

Antenna Routing

### 4) CONNECTORS

a) SMA – The SMA connector requires a 1N-m torque wrench to properly secure.

# Ranger Specs 7-RNGR-01X

## GENERAL DESCRIPTION

Mentor Ranger® is a water resistant[1,2] WinCE device that is equipped with color Touchscreen display, compact flash, and USB host / device port. Application software can be custom-designed making it adaptable to a wide variety of applications. It has an optional internal wireless modem for Mobitex, GPRS and 1xRTT networks. It can be used for vehicle navigation, AVL (Automatic Vehicle Location) and/or Computer Aided Dispatch systems for fleet applications.

## STANDARD FEATURES

- 512Mb of Flash (64 MB)
- 1024Mb of SDRAM (128 MB)
- USB Host / Device Port
- Built in odometer signal conditioner
- 2 Analog Input / Open Drain Output with software selectable pull up or pull down
- 6 Button Keypad
- 1W Stereo Speakers
- TFT Color Display with Touchscreen
- Type II Compact Flash Port
- Covert Microphone
- RS-232 Com Port
- External Microphone and Speaker Connection
- Internal ISO 7816 Contact Smart Card Reader

## COMPLIANCE AND TESTING

- FCC Class A Part 15
- IEC 60950 3rd Edition (2000)
- ISO 7637-1 Load Dump Transient

- MIL STD 810F: General Vibration
- MIL STD 810F: Shock
- IP54: Environmental, Dust and Water exposure [6]

**OPTIONAL FEATURES**

- Taximeter
- ISO 7811 Magnetic card reader
- ISO 14443 Contactless[3] Smart Card Reader
- Internal Compact Flash Socket (may be used for 802.11 type I CF cards)
- Internal 16 Channel GPS – Requires Active GPS Antenna
- Internal Wireless Data Modems[3] (GPRS, 1xRTT)
- LCD heater - Recommended for operating environments below 0 °C
- Handset and/or Handsfree voice calls

**KEY SPECIFICATIONS**

- Supply Voltage

| | |
|---|---|
| Typical | 12 V |
| Min | 9 V |
| Max | 32 V |

- Current Consumption

| Input Voltage (V) | Current Draw (mA) | | |
|---|---|---|---|
| | Standby | Typical[4] | LP2[7] |
| 9 | 66 | 860 | 164 |
| 13.8 | 50 | 572 | 121 |
| 24 | 34 | 343 | 84 |
| 30 | 30 | 283 | 73 |

- Maximum[5] 2.5A

# Ranger Specs 7-RNGR-01X

- Operating Temperature
  Min -30° C Max 65° C
- Storage Temperature
  Min -30° C Max 70° C
- Size
  8.25" x 2.0" x 5.75"
  210mm x 51mm x 146 mm
- Weight
  2.0 lbs / 0.9 kg
- 5% - 95% relative humidity non-condensing

**Foot Notes**

1) Ranger is designed to be splash resistant. It's not designed to be immersed in water.

2) Ranger may not be water resistant when some of the options are specified.

3) Contactless Smart Card and Wireless Modem options cannot be specified at the same time.

4) Unit running with full backlight without GPS, modem, or heater options.

5) This is an absolute maximum which includes an installed modem and all peripheral devices

6) Unit is IP54 rated for water without Internal GPS/Modem, Mag swipe, or Taximeter Options.

7) Low Power Mode 2: Display is off, Unit Idle without GPS, modem or heater options

# Ranger Specs 7-RNGR-01X

**NOTE:** Mentor Engineering Inc. reserves the right to change circuitry and specifications without notice at any time. Please ensure you have the most recent revision of this document.

**NOTE:** Operation at Temperatures outside the ranges is not recommended.

**NOTE:** Only use Mentor Engineering approved cables for installation purposes. Refer to cable section of the Hardware Installation Manual for additional information.

# Appendix A - Conformity

**1) FCC CLASS A PART 15**

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

a) This device may not cause harmful interference

b) This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

The user of this equipment is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**2) IEC 60950 3RD EDITION (2000) SAFETY OF INFORMATION TECHNOLOGY EQUIPMENT**

**3) ISO 7637-1 LOAD DUMP TRANSIENT**

Designed for ISO 7637-1 Load Dump Transient (Test Pulse 5) - Class D at +85V

# Appendix A - Conformity

**4) MIL STD 810F: GENERAL VIBRATION**

Tested to MIL-STD-810F Vibration Test Method 514.5 Procedure I: General Vibration, Category 20 Ground Vehicles.\

**4.1) Highway Vehicle Endurance Testing**

Each axis was exposed to 1 hour of vibration according to Figure 514.5C-1 U.S. Highway Truck Vibration Exposure Levels. This is an accelerated fatigue test meant to test the unit's life cycle. The unit was functionally tested before and after the test.

**5) MIL STD 810F: SHOCK TEST**

Tested to MIL-STD-810F Shock Test Method 516.5 Procedure I: Functional Shock. Functional Shock was performed on the vertical, transverse, and longitudinal axes with a pulse of 40gs. The tests were performed to ensure the unit stays intact during vehicle operation.

**6) IEC 60529 - IP54**

Tested to IEC 60529 IP54 for protection against ingress of water with harmful effects splashing when unit is equipped with an internal smart card reader. Unit must not be equipped with magnetic card reader, taximeter, or any internal modem/GPS options.

# Appendix B - RF Radiation Specs

**1) FCC RADIO FREQUENCY EXPOSURE RULES**

Based on FCC rules 2.1091 and 2.1093 and FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields, OET Bulletin 65 and its Supplement C, all radio units are subject to routine environmental evaluation for radio-frequency (RF) exposure prior to equipment authorization or use.

For mobile devices, defined as a transmitting device designed to be generally used such that a separation distance of at least 20 cm is maintained between the body of the user and the transmitting radiated structure, the human exposure to RF radiation can be evaluated in terms of Maximum Permissible Exposure (MPE) limits for field strength or power density in mW/cm2.

**2) HOW TO COMPLY WITH FCC SAR/MPE GUIDELINES**

In order to comply with FCC SAR/MPE Guidelines the antenna must be placed a minimum of 20 cm from the vehicles edge. To accomplish this, and to ensure optimum antenna performance Mentor Engineering recommends that antenna be installed in the center of the vehicle rooftop.

# Appendix B - RF Radiation Specs

**WARNING: The user should be instructed to maintain the minimum distance from the antenna.**

### 3) SAR AND MPE LIMITS

SAR limits for General Population/Uncontrolled exposure is 1.6W/kg for partial body exposure, averaged over 1 g of tissue and 4 W/kg for hands, wrists and feet averaged over 10 g of tissue. The limits for Occupational/Controlled exposure are more relaxed, i.e. 8 W/kg for partial body and 20 W/kg for hands, wrists and feet. The 1.6 W/kg limit applies for most Ranger applications.

The limit for MPE is 0.6mW/cm2 at 900 MHz.

RF exposure distance is based on normal operating proximity to the user's or nearby persons' body. This distance is measured from any part of a radiating structure, generally the antenna, to the closest part of the body.

### 4) LABELING

If the antenna is installed at least 20 cm from the vehicle's edge no warning label is required.

If the antenna is not at least 20 cm from any vehicle edge, an additional RF radiation hazard label that warns the user or nearby persons to keep away from the antenna by the specified distance is required. This is because the minimum separation distance of the final device configuration cannot be met due to occasional non-essential operating conditions or requirements.

# Appendix B - RF Radiation Specs

An example statement is shown below.

> "Warning: To meet the FCC RF exposure requirement for mobile transmitter end products, ensure that the antenna is at least 20 cm (8") away from the user, or nearby persons, when transmitting."

# Appendix C - Modem Details

**1) IDEN**

Frequency TX: 806 to 821 MHz
Frequency RX: 851 to 866 MHz
TX Power: 0.6W

**2) CDMA (1XRTT)**

Frequency TX: 824 to 849 MHz
1850 to 1910 MHz
Frequency RX: 869 to 894 MHz
1930 to 1990 MHz
TX Power: 1W

**3) GSM/GPRS NORTH AMERICA**

Frequency TX: 824 to 849 MHz
1850 to 1910 MHz
Frequency RX: 869 to 894 MHz
1930 to 1990 MHz
TX Power: 2W in 850 MHz band, 1W in 1900 MHz band

**4) GSM/GPRS EUROPE**

Frequency TX: 880 to 915MHz
1710 to 1785 MHz
Frequency RX: 925 to 960 MHz
1805 to 1880 MHz
TX Power: 2W in 900 MHz band, 1W in 1800 MHz band

# Appendix D - Approvals

**1) 1XRTT**

Contains Transmitter Module FCC ID: 09EQ2438F-M

# APPENDIX B
## PROPOSAL CALCULATION WORKSHEET

Please submit your price proposal on this worksheet. Prices proposed shall be for accomplishing the work specified in *Appendix A,* Scope of Work, and shall include all labor, materials, equipment, and all applicable surcharges including, but not limited to, taxes, overhead, and profit. Prices proposed shall be effective for the period of June 1, 2010 through June 30, 2012.

### TASK 1.0 INSTALLATION /REMOVAL OF RADIOS & MDTs

The selected Contractor will be paid for Task 1.0 on a fixed price per unit based on the actual numbers of installations and removals, billable monthly.

| ITEM | PRICE PER UNIT | QUANTITY | PRICE |
|---|---|---|---|
| Radio Installation | | 100 | $ |
| MDT Installation | | 150 | $ |
| Radio Removal | | 100 | $ |
| MDT Removal | | 150 | $ |
| | | | |
| **Total Price Task 1.0** | | | **$ _____** |

*Note: The quantities specified for installations and removals are estimates only and may be subject to change.*

### TASK 2.0 RADIO AND EQUIPMENT MAINTENANCE

The selected Contractor will be paid for Task 2.0 on a fixed price for each MDT problem resolved, regardless of number of trips made to the FSP tow contractor site. The Contractor should bill MTC SAFE on a monthly basis for providing services under this task.

| ITEM | PRICE PER UNIT | QUANTITY | PRICE |
|---|---|---|---|
| Radio Routine Maintenance | | 150 | $ |
| MDT Routine Maintenance | | 175 | $ |
| | | | |
| **Total Price Task 2.0** | | | **$ _____** |

*Note: The quantities specified for units requiring routine repair/maintenance are estimates only and may be subject to change.*

### TASK 3.0 TASK ORDERS

Task orders will be compensated as a fixed price contract on the basis of satisfactory completion of deliverables or on a time and materials basis based on the hourly rates listed below.

| PERSONNEL LIST | POSITION | HOURLY RATE |
|---|---|---|
| | | |
| | | |
| | | |
| | | |

## APPENDIX C
## Contractor's Reference Form

| |
|---|
| Name of Bidding Company |
| Representative Name & Title |
| Phone Number |

Please provide three (3) separate references of clients with contracts of $50,000 or more in the last three (3) years. References will be contacted during the week of April 19th. It is the Contractor's responsibility to provide reliable and responsive references. Only the three (3) references listed below will be contacted; additional references will not be considered.

The following information is required for each reference given (additional sheets may be used if necessary):

| | |
|---|---|
| **1.** | **Client's Name** |
| | Contact Person |
| | Address |
| | City & Zip Code |
| | Phone Number & Email |
| | Type of Work Performed |
| | Contract Amount $ |

| | |
|---|---|
| **2.** | **Client's Name** |
| | Contact Person |
| | Address |
| | City & Zip Code |
| | Phone Number & Email |
| | Type of Work Performed |
| | Contract Amount $ |

| | |
|---|---|
| **3.** | **Client's Name** |
| | Contact Person |
| | Address |
| | City & Zip Code |
| | Phone Number & Email |
| | Type of Work Performed |
| | Contract Amount $ |

# APPENDIX D
## CALIFORNIA LEVINE ACT STATEMENT

California Government Code § 84308, commonly referred to as the "Levine Act," precludes an officer of a local government agency from participating in the award of a contract if he or she receives any political contributions totaling more than $250 in the 12 months preceding the pendency of the contract award, and for three months following the final decision, from the person or company awarded the contract. This prohibition applies to contributions to the officer, or received by the officer on behalf of any other officer, or on behalf of any candidate for office or on behalf of any committee.

MTC's commissioners include:

| | | |
|---|---|---|
| Tom Azumbrado | Dorene M. Giacopini | Jon Rubin |
| Tom Bates | Federal D. Glover | Bijan Sartipi |
| Dave Cortese | Scott Haggerty | James P. Spering |
| Dean J. Chu | Anne W. Halsted | Adrienne J. Tissier |
| Chris Daly | Steve Kinsey | Amy Rein Worth |
| Bill Dodd | Sue Lempert | Ken Yeager |
| | Jake Mackenzie | |

1. Have you or your company, or any agent on behalf of you or your company, made any political contributions of more than $250 to any MTC commissioner in the 12 months preceding the date of the issuance of this request for qualifications?

   ___ YES ___ NO
   If yes, please identify the commissioner: _____

2. Do you or your company, or any agency on behalf of you or your company, anticipate or plan to make any political contributions of more than $250 to any MTC commissioners in the three months following the award of the contract?

   ___ YES ___ NO
   If yes, please identify the commissioner: _____

Answering yes to either of the two questions above does not preclude MTC from awarding a contract to your firm. It does, however, preclude the identified commissioner(s) from participating in the contract award process for this contract.

_____ _____
DATE (SIGNATURE OF AUTHORIZED OFFICIAL)

_____
(TYPE OR WRITE APPROPRIATE NAME, TITLE)

_____
(TYPE OR WRITE NAME OF COMPANY)

# APPENDIX E

## SYNOPSIS OF PROVISIONS IN MTC SAFE'S STANDARD CONSULTANT AGREEMENT

The selected consultant will be required to sign MTC SAFE standard consultant agreement, a copy of which standard agreement may be obtained from the Project Manager for this RFP. In order to provide bidders with an understanding of some of MTC SAFE standard contract provisions, the following is a synopsis of the major requirements in our standard agreement for professional services. THE ACTUAL LANGUAGE OF THE STANDARD CONSULTANT AGREEMENT SUPERSEDES THIS SYNOPSIS.

Termination: MTC may, at any time, terminate the Agreement upon written notice to Consultant. Upon termination, MTC SAFE will reimburse the Consultant for its costs for incomplete deliverables up to the date of termination. Upon payment, MTC SAFE will be under no further obligation to the Consultant. If the Consultant fails to perform as specified in the agreement, MTC SAFE may terminate the agreement for default by written notice following a period of cure, and the Consultant is then entitled only to compensation for costs incurred for work products acceptable to MTC SAFE, less the costs to MTC SAFE of rebidding.

Insurance Requirement: See *Appendix E-1, Insurance Requirements*, attached hereto.

Independent Contractor: Consultant is an independent contractor and has no authority to contract or enter into any other agreement in the name of MTC SAFE. Consultant shall be fully responsible for all matters relating to payment of its employees including compliance with taxes.

Indemnification: Consultant agrees to defend, indemnify and hold MTC SAFE harmless from all claims, damages, liability, and expenses resulting from any negligent or otherwise wrongful act or omission of Consultant in connection with the agreement. Consultant agrees to defend any and all claims, lawsuits or other legal proceedings brought against MTC SAFE arising out of such negligent or wrongful acts or omissions. The Consultant shall pay the full cost of the defense and any resulting judgments.

Data Furnished by MTC SAFE: All data, reports, surveys, studies, drawings, software (object or source code), electronic databases, and any other information, documents or materials ("MTC SAFE Data") made available to the Consultant by MTC SAFE for use by the Consultant in the performance of its services under this Agreement shall remain the property of MTC SAFE and shall be returned to MTC SAFE at the completion or termination of this Agreement. No license to such MTC SAFE Data, outside of the Scope of Work of the Project, is conferred or implied by the Consultant's use or possession of such MTC SAFE Data. Any updates, revisions, additions or enhancements to such MTC SAFE Data made by the Consultant in the context of the Project shall be the property of MTC SAFE.

Ownership of Work Product: All data, reports, surveys, studies, drawings, software (object or source code), electronic databases, and any other information, documents or materials ("Work Product") written or produced by the Consultant under this Agreement and provided to MTC SAFE as a deliverable shall be the property of MTC SAFE. Consultant will be required to assign all rights in copyright to such Work Product to MTC SAFE.

Personnel and Level of Effort: Personnel assigned to this Project and the estimated number of hours to be supplied by each will be specified in an attachment to the Agreement. No substitution of personnel or substantial decrease of hours will be allowed without prior written approval of MTC SAFE.

Subcontracts: No subcontracting of any or all of the services to be provided by Consultant shall be allowed without prior written approval of MTC SAFE. MTC SAFE is under no obligation to any subcontractors.

Consultant's Records: Consultant shall keep complete and accurate books, records, accounts and any and all work products, materials, and other data relevant to its performance under this Agreement. All such records shall be available to MTC SAFE for inspection and auditing purposes. The records shall be retained by Consultant for a period of not less than four (4) years following the fiscal year of the last expenditure under this Agreement.

Prohibited Interest: No member, officer or employee of MTC SAFE can have any interest in this agreement or its proceeds and Consultant may not have any interest which conflicts with its performance under this Agreement.

Governing Law. The Agreement shall be governed by the laws of the State of California.

## APPENDIX E-1 - INSURANCE REQUIREMENTS

Minimum Insurance Coverages. CONTRACTOR shall, at its own expense, obtain and maintain in effect at all times the following types of insurance against claims, damages and losses due to injuries to persons or damage to property or other losses that may arise in connection with the performance of work under this Agreement, placed with insurers with a Best's rating of A-X or better.

| Yes (√) | **Please certify by checking the boxes at left that required coverages will be provided within five (5) days of MTC's notice to firm that it is the successful proposer.** |
|---|---|
| ___ | Workers' Compensation Insurance in the amount required by the applicable laws, and Employer's Liability insurance with a limit of not less than $1,000,000 per employee and $1,000,000 per occurrence, and any and all other coverage of CONTRACTOR's employees as may be required by applicable law. Such policy shall contain a Waiver of Subrogation endorsement in favor of MTC. Such Workers Compensation & Employers Liability may be waived, if and only for as long as CONTRACTOR is a sole proprietor with no employees. |
| ___ | Commercial General Liability Insurance for Bodily Injury and Property Damage liability, covering the operations of CONTRACTOR and CONTRACTOR's officers, agents, and employees and with limits of liability which shall not be less than $1,000,000 combined single limit per occurrence with a general aggregate liability of not less than $2,000,000, and Personal & Advertising Injury liability with a limit of not less than $1,000,000. Expense for Indemnitee's defense costs shall be outside of policy limits and such policy shall be issued on a Duty to Defend Primary Occurrence Form.<br><br>MTC, and its commissioners, officers, representatives, agents and employees are to be named as additional insureds. Such insurance as afforded by this endorsement shall be primary as respects any claims, losses or liability arising directly or indirectly from CONTRACTOR's operations. |
| ___ | Business Automobile Insurance for all automobiles owned, used or maintained by CONTRACTOR and CONTRACTOR's officers, agents and employees, including but not limited to owned, leased, non-owned and hired automobiles, with limits of liability which shall not be less than $1,000,000 combined single limit per occurrence. |
| ___ | Umbrella Insurance in the amount of $5,000,000 providing excess limits over Employer's Liability, Automobile Liability, and Commercial General Liability Insurance. |
| ___ | Errors and Omissions Professional Liability Insurance in an amount no less than $2,000,000. If such policy is written on a "Claims-Made" (rather than an "occurrence") basis, CONTRACTOR agrees to maintain continuous coverage in effect from the date of the commencement of services to at least three (3) years |

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| | beyond the termination or completion of services or until expiration of any applicable statute of limitations, whichever is longer. The policy shall provide coverage for all work performed by the CONTRACTOR and any work performed or conducted by any subcontractor/consultant working for or performing services on behalf of the CONTRACTOR. No contract or agreement between the CONTRACTOR and any subcontractor/consultant shall relieve the CONTRACTOR of the responsibility for providing this Errors & Omissions or Professional Liability coverage for all work performed by the CONTRACTOR and any subcontractor/consultant working on behalf of the CONTRACTOR on the project. |
| ___ | Property Insurance covering CONTRACTOR'S own business personal property and equipment to be used in performance of this Agreement, materials or property to be purchased and/or installed on behalf of MTC (if any), debris removal, and builders risk for property in the course of construction (if applicable). Coverage shall be written on a "Special Form" ("All Risk") that includes theft, but excludes earthquake, with limits at least equal to the replacement cost of the property. Such policy shall contain a Waiver of Subrogation in favor of MTC. If such insurance coverage has a deductible, the CONTRACTOR shall also be liable for the deductible. |

**By signing below, you acknowledge and agree to provide the required certificate of insurance providing verification of the minimum insurance requirements listed above within five (5) days of MTC SAFE's notice to firm that it is the successful proposer.**

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| Representative Name and Title | |
| Name of Authorizing Official | |
| Authorized Signature | |
| Date | |

**NOTE: If you were unable to check "Yes" for any of the required minimum insurance coverages listed above, a request for exception to the appropriate insurance requirement(s) must be brought to MTC SAFE's attention no later than the date for protesting RFP provisions. If such objections are not brought to MTC SAFE's attention consistent with the protest provisions of this RFP, compliance with the insurance requirements will be assumed.**